

# Service Procedures for the Model M31, M50, M75 Dryer **Hot Surface Ignitor Gas**

**American Dryer Corporation**  
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[www.amdry.com](http://www.amdry.com)

# Retain This Manual in a Safe Place for Future Reference

This product embodies advanced concepts in engineering, design, and safety. If this product is properly maintained, it will provide many years of safe, efficient, and trouble free operation.

Only qualified technicians should service this equipment.

OBSERVE ALL SAFETY PRECAUTIONS displayed on the equipment or specified in the installation manual included with the dryer.

The following "FOR YOUR SAFETY" caution must be posted near the dryer in a prominent location.

## FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

## POUR VOTRE SÉCURITÉ

Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

We have tried to make this manual as complete as possible and hope you will find it useful. The manufacturer reserves the right to make changes from time to time, without notice or obligation, in prices, specifications, colors, and material, and to change or discontinue models. The illustrations included in this manual may not depict your particular dryer exactly.

## IMPORTANT

For your convenience, log the following information:

DATE OF PURCHASE \_\_\_\_\_ MODEL NO. M31,M50,M75

DISTRIBUTOR'S NAME \_\_\_\_\_

SERIAL NUMBER(S) \_\_\_\_\_

For replacement parts, contact the distributor from which the dryer was purchased or contact:

### American Dryer Corporation

88 Currant Road  
Fall River MA 02720-4781 USA  
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e-mail: techsupport@amdry.com  
www.amdry.com

### "IMPORTANT NOTE TO PURCHASER"

Information must be obtained from your local gas supplier on the instructions to be followed if the user smells gas. These instructions must be posted in a prominent location near the dryer.

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## IMPORTANT

You must disconnect and lockout the electric supply and the gas supply or the steam supply before any covers or guards are removed from the machine to allow access for cleaning, adjusting, installation, or testing of any equipment per OSHA (Occupational Safety and Health Administration) standards.

Please observe all safety precautions displayed on the equipment and/or specified in the installation manual included with the dryer.

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## CAUTION

Dryer(s) should never be left unattended while in operation.

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“Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper operation.”

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«Attention: Lor des opérations d’entretien des commandes étiqueter tous fils avant de les déconnecter. Toute erreur de câblage peut être une source de danger et de panne.»

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## WARNING

Children should not be allowed to play on or near the dryer(s). Children should be supervised if near dryer(s) in operation.

Under no circumstances should the dryer door switch(es), lint door/drawer switch(es), or heat safety circuit(s) ever be disabled.

The dryer must never be operated with any of the back guards, outer tops, or service panels removed. Personal injury or fire could result.

The dryer must never be operated without the lint filter/screen in place, even if an external lint collection system is used.

## FOR YOUR SAFETY

Do not use dryer in the presence of dry cleaning fumes.

The dryers must not be installed or stored in an area where it will be exposed to water and/or weather.

The wiring diagram for the dryer is located in the front electrical control box area.

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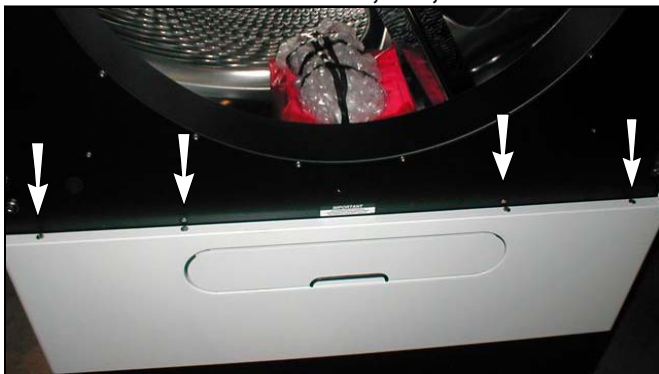
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# Part Locations and Removal

## LOWER FRONT PANEL REMOVAL:

Remove the lint drawer. Remove the four screws located just below the loading door. Tilt the top of the panel out and lift the panel up and away from the dryer.

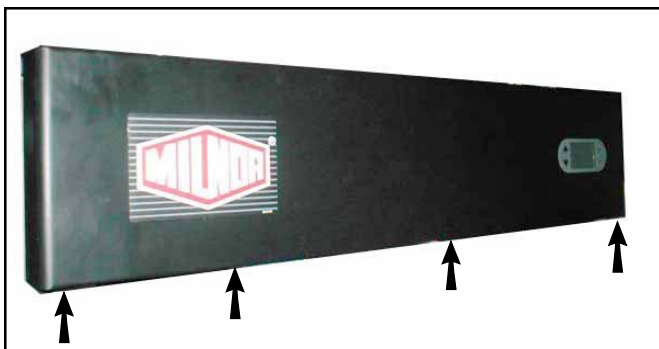
**For Models M31,M50,M75**



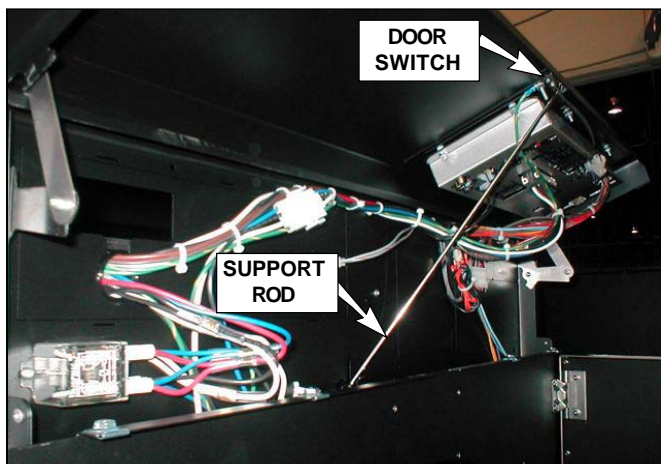
## UPPER FRONT PANEL REMOVAL:

Remove the four screws located just above the top loading door. Tilt the bottom of the panel out and lift the panel up and away from the dryer.

**For Models M31,M50,M75**



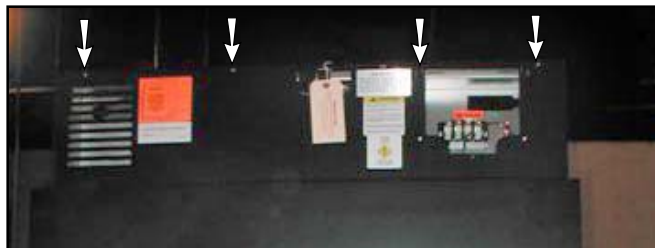
Tilt the bottom of the panel out and lift the panel up. Align support rod into hole to support control panel. Disconnect the electrical connections. Remove screw from hinge to remove the control panel.



## TOP COVER REMOVAL:

First remove the back guard, the four screws holding top cover. Next pull top cover toward the rear of the dryer and lift up.

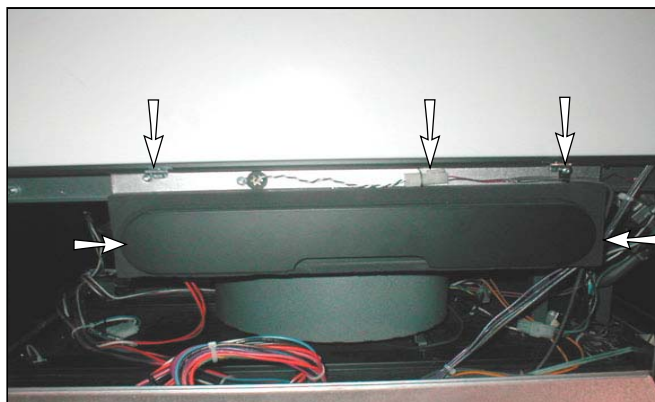
**For Models M31,M50,M75**



## LINT BOX/BLOWER ASSEMBLY REMOVAL:

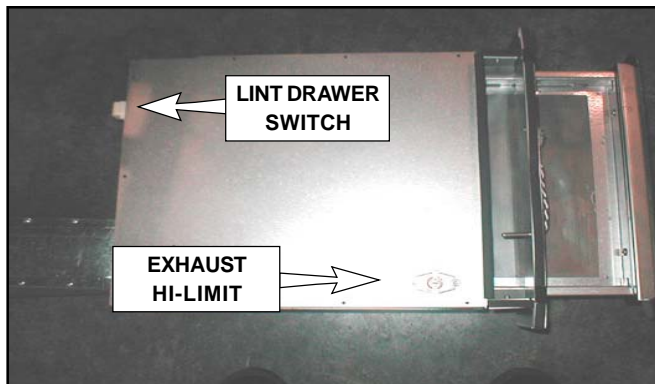
Unplug the motor harness.

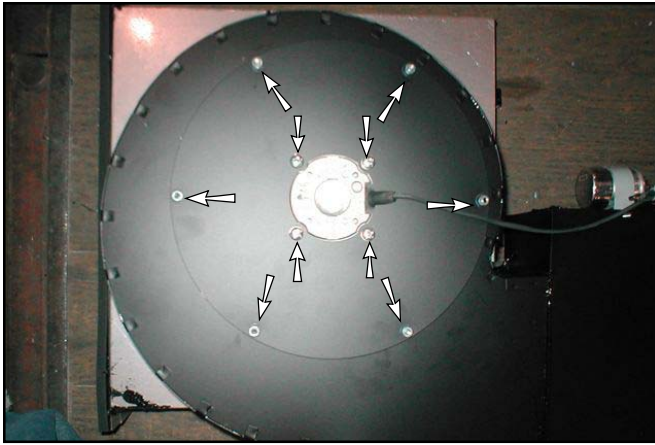
For M31, remove two screws above the lint drawer. For M50, M75, also remove two screws beneath the gasket on the left and right side of the lint drawer. Also, unplug the exhaust temperature probe.



Unplug two connections on the exhaust hi-limit at the left of the lint box. Also disconnect the two connections for the lint drawer switch, located at the back of the lint box. The lint box may now be pulled out through the front of the dryer.

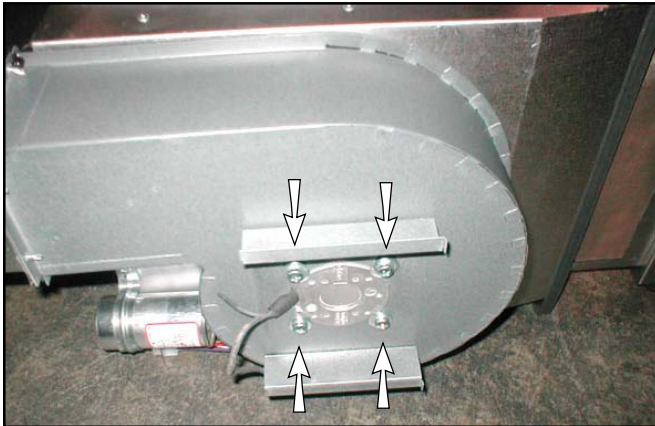
**For Models M31,M50,M75**





#### For Models M31,M50,M75

To remove motorized impellor assembly:  
Remove the six hex nuts shown with arrows. Now pull the blower motor assembly apart from the blower housing. Remove the four phillips screws shown with arrows and separate the motorized impellor from the blower motor mount.



To remove motorized impellor assembly, remove lint housing cover, lint screen, and the four screws shown with arrows. Pull the motorized impellor assembly out through the opening.

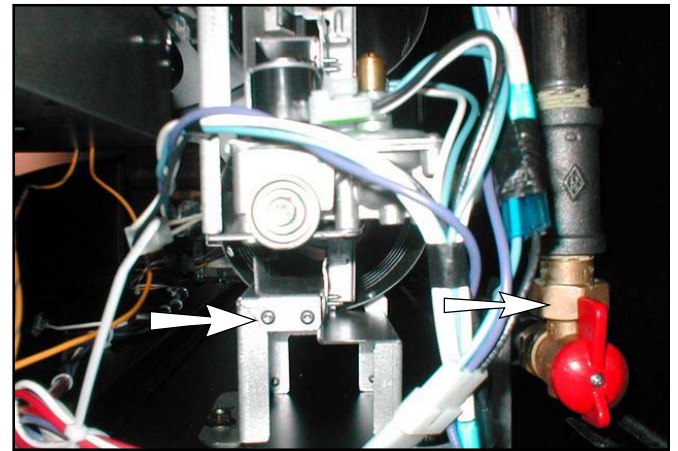
#### GAS VALVE/IGNITION SYSTEM REMOVAL:

Be sure to shut off the gas main and then proceed to remove electrical connections and screws indicated. Remove lower front panel. Disconnect union and screws noted with arrows.

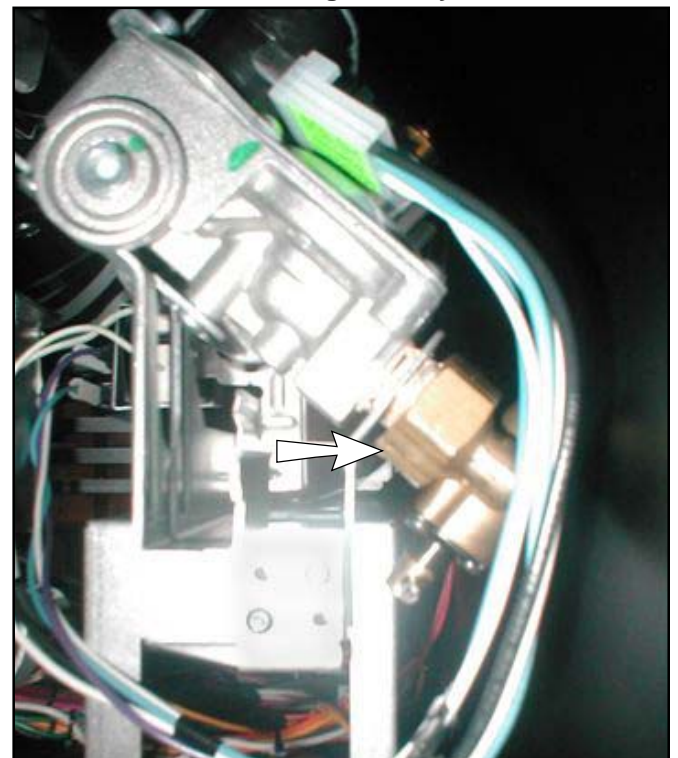
By removing the top screws you will be able to remove the burner tube. After, removing the top burner, without damaging the Hot Surface Ignitor, remove the whole gas valve assembly. Be careful during assembly not to damage the Hot Surface Ignitor. Replace assembly in the reverse order.

Inspect all wires to be sure all lead directly toward the front of the dryer. Be sure no wires are caught on the burner tube or ignitor.

#### For Models M31,M50,M75



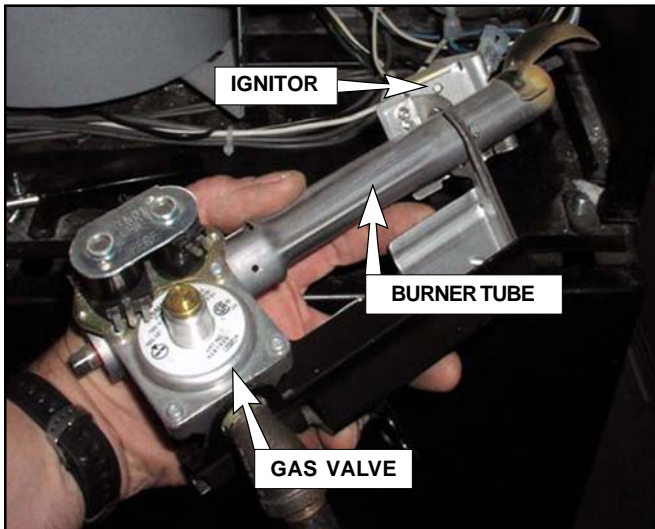
#### Gas Valve Ignition System





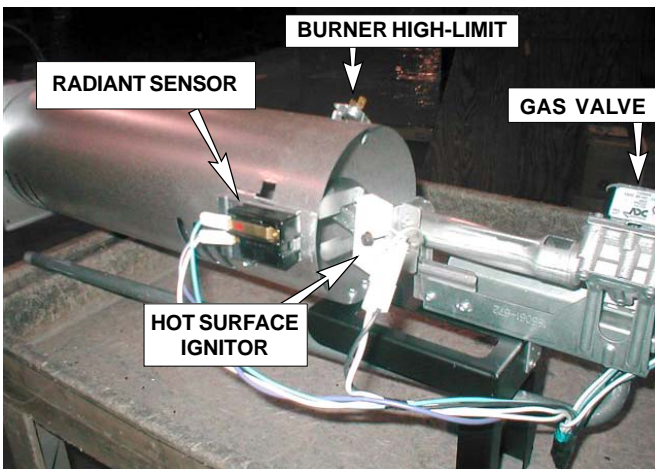
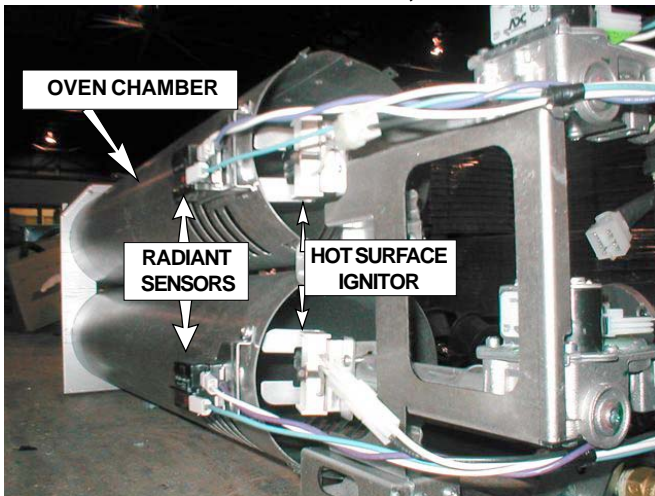
## GAS VALVE/IGNITION SYSTEM COMPONENTS:

For Models M31,M50,M75



## OVEN HOUSING COMPONENTS:

Dual Burner M50,M75

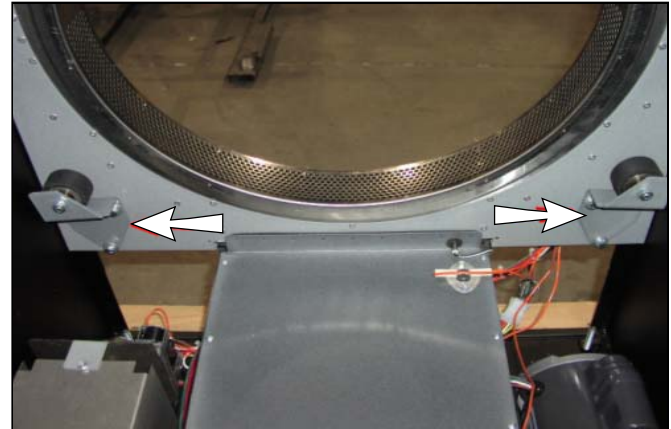


## TUMBLER SUPPORT

### WHEEL ASSEMBLY REPLACEMENT:

The front wheel assemblies can be replaced with the lower front panel removed. Remove the three bolts by reaching upward with a socket or box wrench. The illustration below is provided to show the location of these wheels as the wheels cannot easily be seen while standing in front of the dryer.

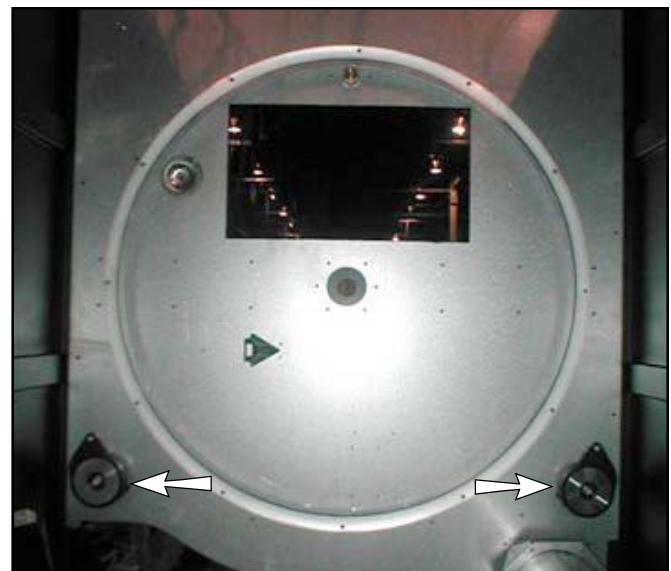
For Models M31



The left rear wheel assembly can be removed with just the back guard removed. The rear right wheel requires removing the back guard, heat duct, and oven. Be sure to mark the position of rear wheel brackets prior to removal (refer to photo right).

All wheel assemblies are mounted on slots to allow for alignment of the tumbler. After one or more wheel assemblies are replaced, the tumbler must be realigned.

For Models M50,M75



## TUMBLER ALIGNMENT:

Proper alignment is achieved by making the gap between the tumbler and openings in the front and rear bulkheads equal on all sides.

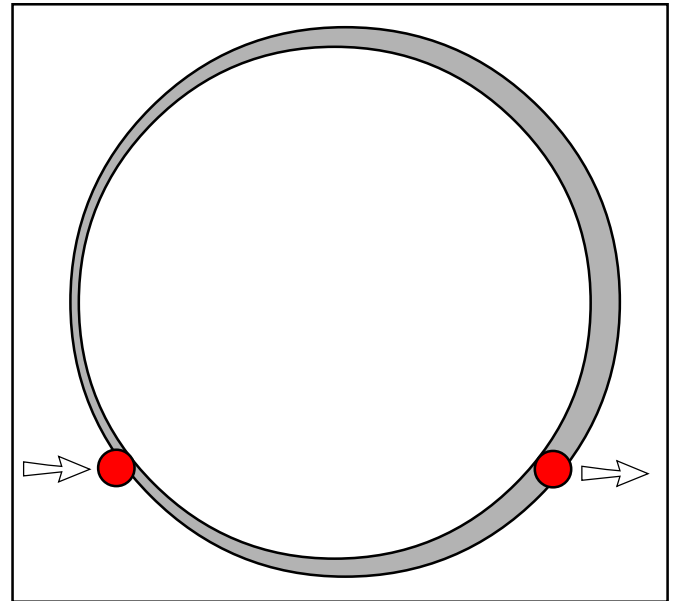
The front to bulkhead may be checked for accuracy by using a thickness gauge. The rear gap is not accessible. Marking the position of the rear wheel brackets before removing the brackets will help in replacing the tumbler back into it's original position when the wheel brackets are reinstalled.



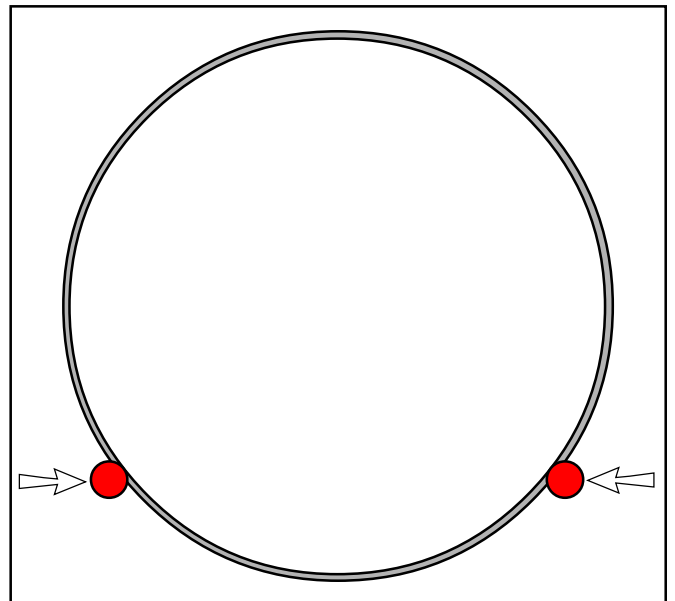
Adjust the tumbler position by loosening the three bolts and forcing the wheel assembly toward the center of the dryer to raise the tumbler and to move it away from the side. A large screwdriver can provide the necessary leverage. Adjustment of the front of the tumbler is made by equalizing the gap on the top, bottom, left and right by moving the wheel assemblies.

## EXAMPLES:

In the illustrations to the right, both wheel assemblies must be moved to the right in order to move the tumbler right. The left wheel assembly must move a little more than the right in order to lift the tumbler.



Below, both wheel assemblies are adjusted correct and spacing is even on all sides.



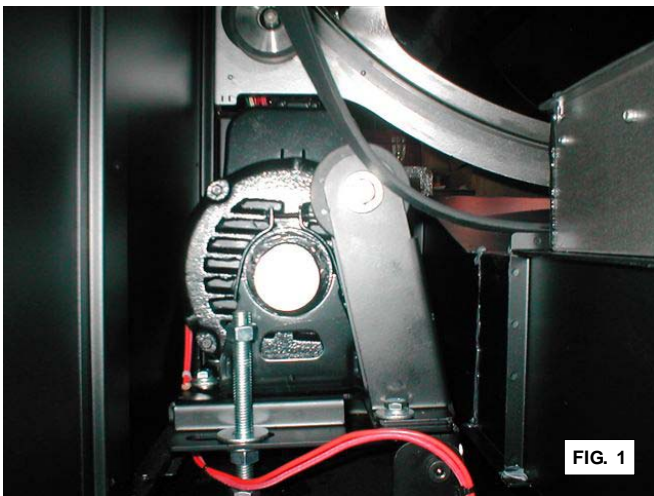
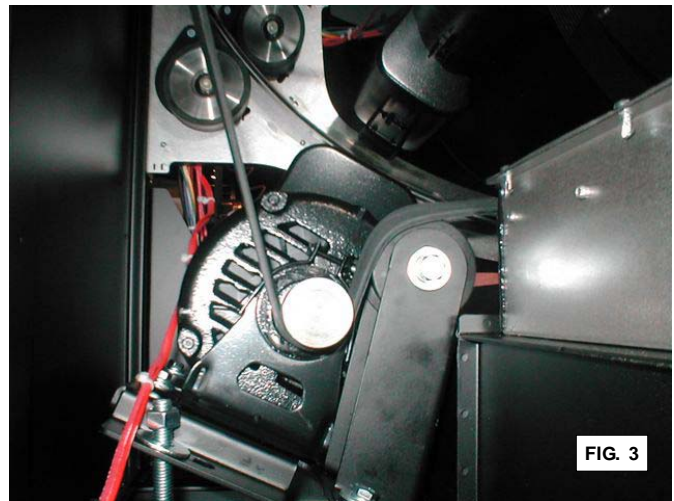
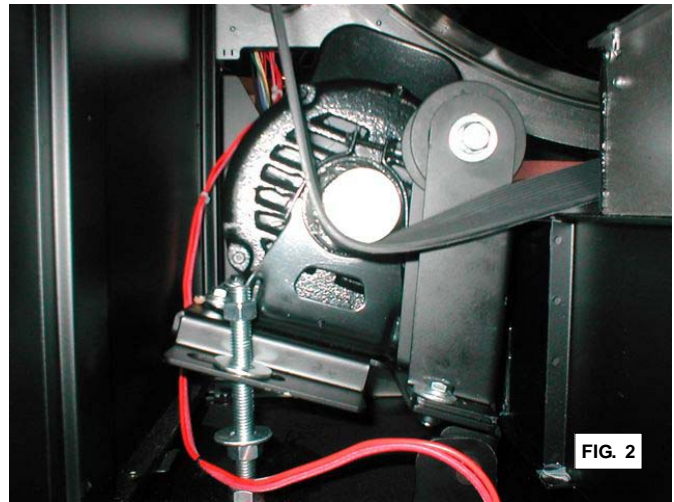


## BELT REPLACEMENT:

Shut off electrical power to the dryer. Lockout and tag out supply voltages. Follow the steps to remove front middle panel. Next you will remove either the front bottom or front upper panel, depending on pocket you are working on. Remove the belt from the motor sheave. Next, remove the two screws fastening the lint coupe to the front panel. Remove the front panel screws, while holding up the basket. Tilt the top of the front panel forward. Take note of position of motor adjustment nut. Spin counterclockwise to loosen tension. The old belt can now be removed. Slide the new belt around basket and push belt to a position close the motor sheave.

## PLACING THE BELT:

Now that the belt is close to the motor sheave (Fig.1), make sure the motor pivot is at it's highest point. Wrap the belt under the motor sheave (Fig.2), then push the belt over the idler wheel (Fig.3). Once this has been accomplished make sure to spin the basket by hand to self align the belt on motor sheave and idler wheel. Tighten the motor adjustment nut to position previous set.



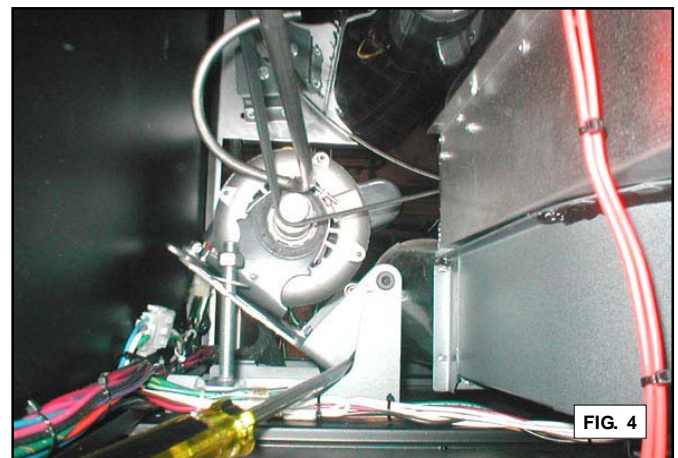
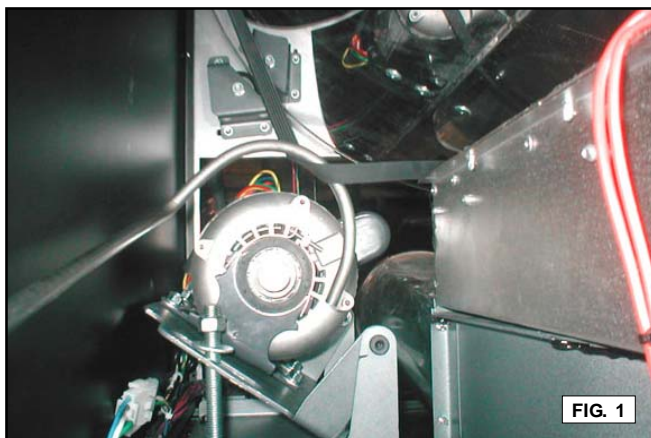
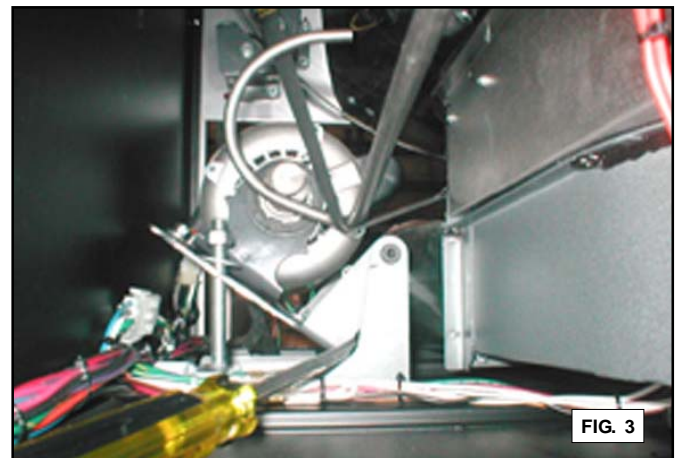
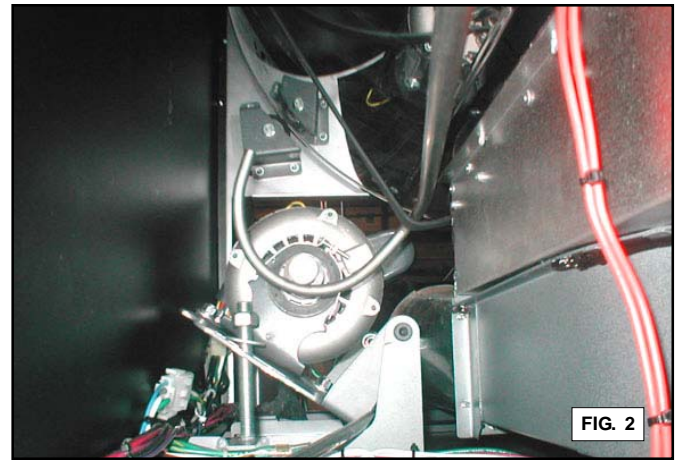


## M31 BELT REPLACEMENT:

Shut off electrical power to the dryer. Lockout and tag out supply voltages. Follow the steps to remove front middle panel. Next you will remove either the front bottom or front upper panel, depending on pocket you are working on. Remove the belt from the motor sheave. Next, remove the two screws fastening the lint coupe to the front panel. Remove the front panel screws, while holding up the basket. Tilt the top of the front panel forward. Take note of position of motor adjustment nut spin counterclockwise to loosen tension. The old belt can now be removed. Slide the new belt around basket and push belt to a position close the motor sheave.

### PLACING THE BELT BACK ON THE MOTOR SHEAVE:

Place belt installation tool (BIT-P/N 319582) over belt (Fig. 1) and rotate in a clockwise direction. While rotating run BIT under motor sheave (Fig. 2). Continue to spin BIT, belt will then wrap under motor sheave (Fig. 3). Remove BIT from dryer (Fig. 4). Next, you want to rotate basket slowly to ensure it is on the sheave completely. Tighten the motor adjustment nut to position previous set.

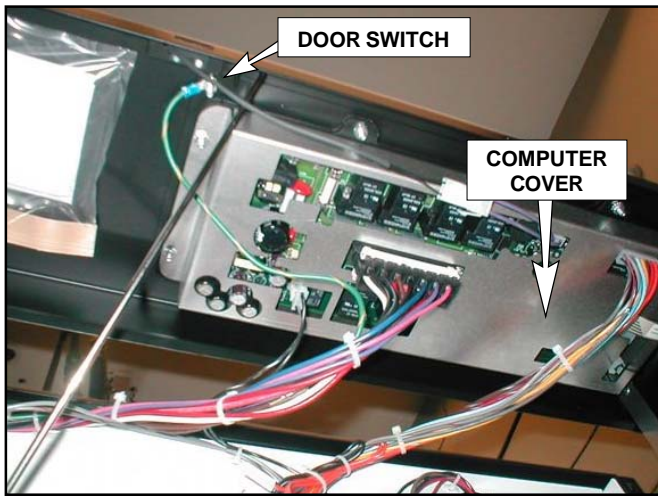


# Electrical Component Locations

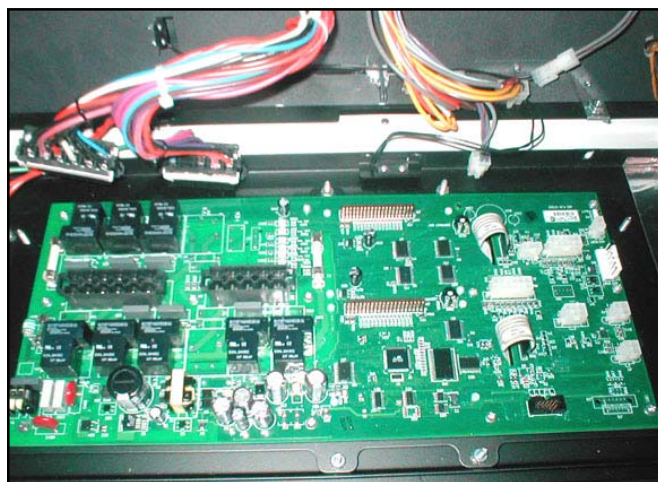
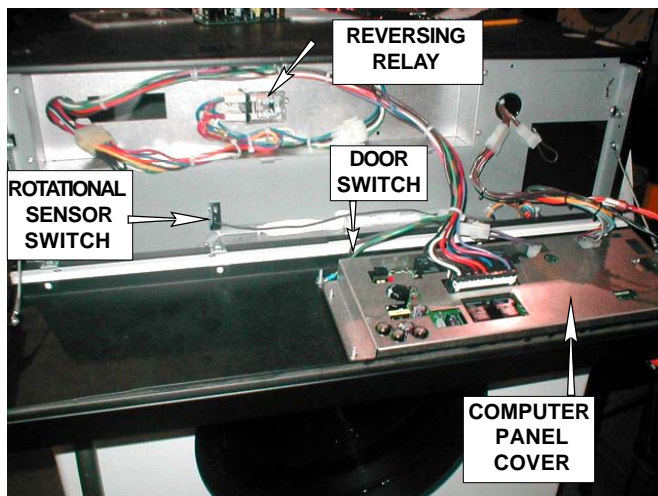
## ELECTRICAL PANEL:

The electrical panel is located behind the front middle panel.

For Models M50,M75



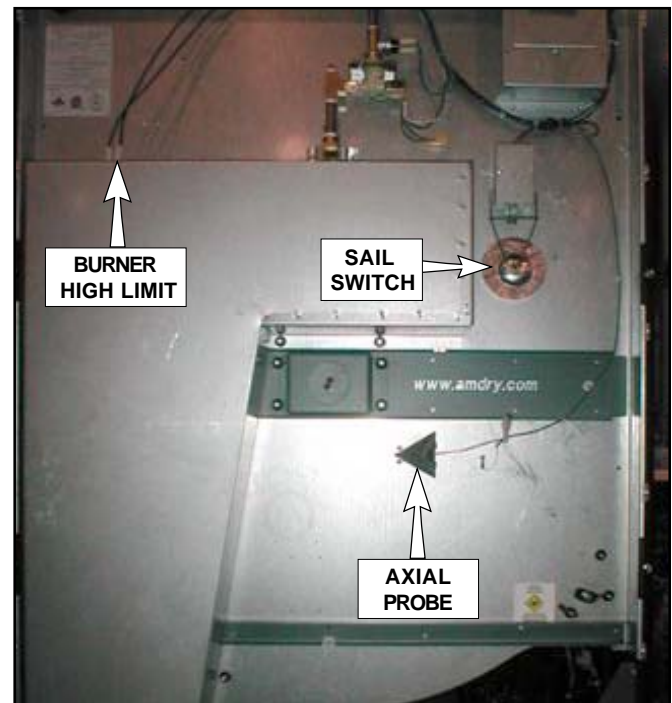
For Models M31



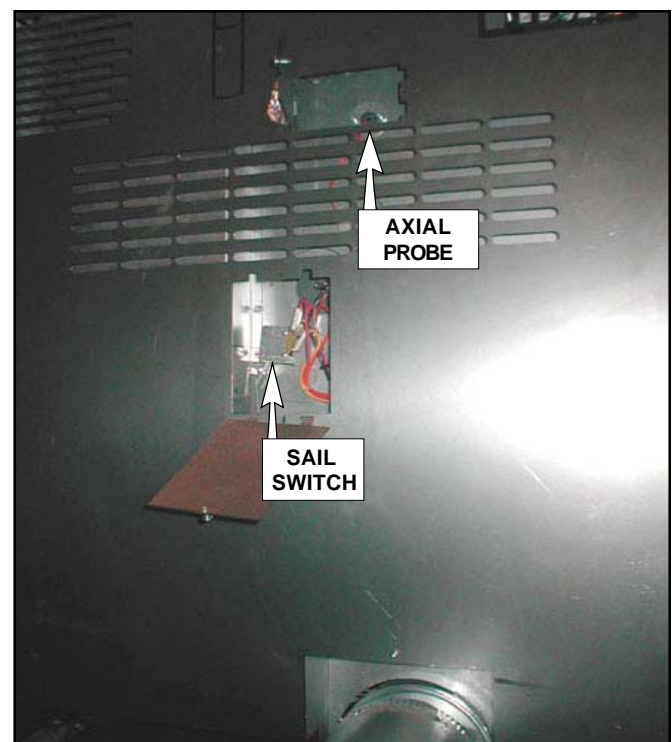
## SAIL SWITCH AND AXIAL PROBE ASSEMBLY:

Located behind back guard. Access doors are provided. Back guard does not have to be removed.

For Models M50,M75



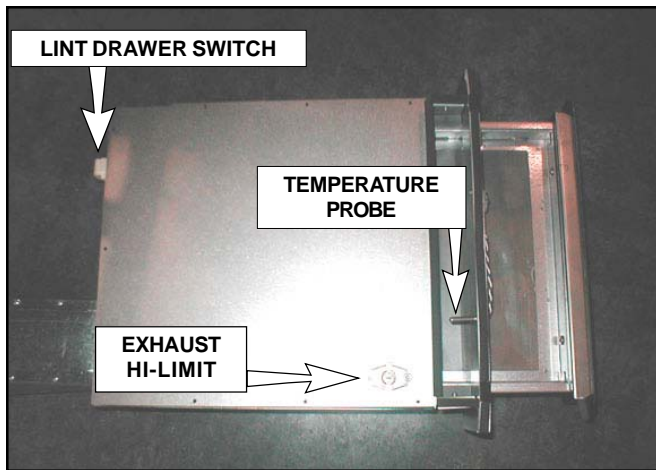
For Models M31





### EXHAUST PROBE, EXHAUST HI-LIMIT, AND LINT DRAWER SWITCH:

Temperature probe and exhaust hi-limit are accessible without the lint box being removed. The lint drawer switch can be removed after the lint box is and the cover has been removed.



Notes \_\_\_\_\_

[illegible]

